



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/510,962	11/01/2004	Oliver Seeger	260421US0PCT	8011
22850	7590	03/09/2007		
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER HAILEY, PATRICIA L	
			ART UNIT	PAPER NUMBER
			1755	

SHORTENED STATUTORY PERIOD OF RESPONSE	NOTIFICATION DATE	DELIVERY MODE
3 MONTHS	03/09/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Notice of this Office communication was sent electronically on the above-indicated "Notification Date" and has a shortened statutory period for reply of 3 MONTHS from 03/09/2007.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com
oblonpat@oblon.com
jgardner@oblon.com

Office Action Summary

Application No.

10/510,962

Applicant(s)

SEEGER ET AL.

Examiner

Patricia L. Hailey

Art Unit

1755

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 December 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

Art Unit: 1755

Applicants' remarks and amendments, filed on December 12, 2006, have been carefully considered. No claims have been canceled or added; claims 1-10 remain pending in this application.

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Applicants' Priority Document was filed on November 1, 2004.

Maintained Rejection

The following rejection of record has been maintained; the text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 102

2. ***Claims 1, 2, and 4-10 stand rejected under 35 U.S.C. 102(e) as being anticipated by Hennemann et al. (U. S. Patent No. 6,409,815).***

Hennemann et al. disclose surface-modified pigments obtained by partial coating of a conductive pigment with an organic modifying agent. The pigment is prepared by dispersing said pigment, adding the modifying agent thereto (if appropriate, as a mixture with a solvent), removing the solvent (if present), with agitation and heating the pigment to 100°C, and drying the partially coated pigment. See the Abstract of Hennemann et al.

Examples of the modifying agent include those of the formula:

Art Unit: 1755



wherein

X has the above-mentioned meaning,

n is 1-30,

m is 1-10, and

p is 3 when X is Si, Sn, Ti or Zr, and 2 when X is Al.

See col. 3, lines 5-17 of Hennemann et al. (lines 5 and 6 define the variable X as "Si, Sn, Ti, Zr, or Al"), which also disclosed n-hexyldecyl-tri-ethoxysilane and methyl-tri-ethoxysilane as exemplary modifying agents; this disclosure is considered to read upon the silane recited in **claims 4-6**.

With respect to **claims 2, 7, and 8**, Hennemann et al. also disclose that, if silanes are used as modifying agents, it may be necessary to subject them to preliminary hydrolysis, as the silane does not react directly with the hydroxyl groups on the surface of the pigment. Thus, water and a solvent are added to the silane, and the mixture is subjected to preliminary hydrolysis by stirring at room temperature for 30 minutes. After the coating operation, heat treatment at temperatures ranging from about 50°C to 200°C is necessary after removal of the solvent. Exemplary solvents include organic solvents, e.g., ketones, ethers, and alcohols. See col. 3, lines 32-43 of Hennemann et al.

Patentees' pigment can be incorporated into systems such as lacquers, casting resins, coatings, printing inks, powder coatings, and the like. See col. 4, lines 15-23 of Hennemann et al.; this disclosure is considered to read upon **claims 9 and 10**.

Hennemann et al. do not explicitly describe the modified pigment as a "goniochromatic luster pigment, nor does the reference explicitly disclose the phrase

Art Unit: 1755

"dielectric low-refractive interference-colored layer". However, this reference at col. 4, lines 32-36 refers to "pearl luster pigments", which is considered equivalent to the term "goniochromatic pigment". Further, the reference's teaching of modifying the pigment with a silane subjected to preliminary hydrolysis with a solvent is considered to read upon Applicants' claim limitation "...layer which includes a polar organic solvent which can interact with the layer material via hydroxyl or amide groups", as said hydrolysis enables the silanes to react with the hydroxyl groups on the surface of the pigment (col. 3, lines 35-37 of Hennemann et al.).

In view of these teachings, Hennemann et al. anticipate claims 1, 2, and 4-10.

Response to Arguments

In response to Applicants' arguments that Hennemann et al. do not teach the claimed invention, it is the Examiner's position that the partial coating of the organic modifying agent disclosed by Hennemann et al. is considered to read upon Applicants' claim limitations regarding a "...layer which comprises a polar organic solvent". Further, because the prior art teaches a polar organic solvent reading upon Applicants' claims, the claim limitations regarding the interaction with the layer material via hydroxyl or amide groups is considered inherently taught by Hennemann et al.

Applicants' have not convincingly shown concrete differences between the prior art and Applicants' claims in their present form.

For these reasons, Applicants' arguments are not persuasive, and the rejection of record is maintained.

Allowable Subject Matter

3. Claim 3 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

4. The following is a statement of reasons for the indication of allowable subject matter:

The prior art does not teach or reasonably suggest ethylene glycol as an organic solvent for the aforementioned preliminary hydrolysis of the silane.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patricia L. Hailey whose telephone number is (571) 272-

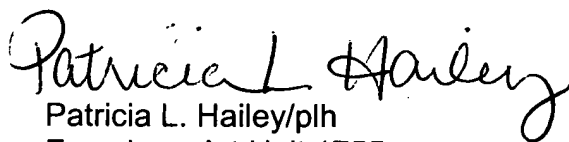
Art Unit: 1755

1369. The examiner can normally be reached on Mondays-Fridays, from 7:00 a.m. to 3:30 p.m.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo, can be reached on (571) 272-1233. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group 1700 Receptionist, whose telephone number is (571) 272-1700.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Patricia L. Hailey/plh
Examiner, Art Unit 1755
March 5, 2007



J.A. LORENZO
SUPERVISORY PATENT EXAMINER